

Supporting Information

Pressure-Swing Absorption and Desorption Behaviours of Ammonia in Bis(trifluoromethylsulfonyl)amide Salts

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Kinetic analysis

The least-squares fitting results are shown in Figures S1 and S2.

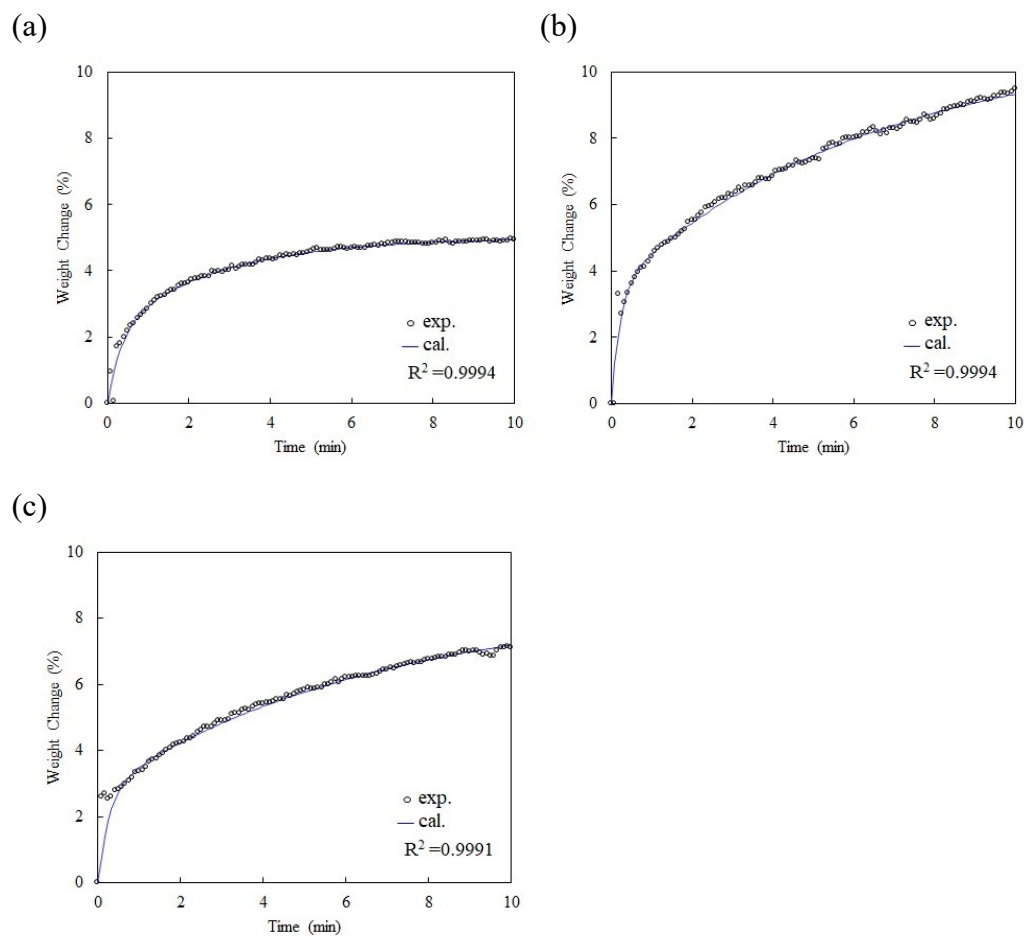


Fig. S1 Reaction kinetics analysis using the double exponential model for the initial stages of NH₃ absorption by TFSA salts at 473 K: (a) Na[TFSA], (b) Mg[TFSA]₂, and (c) Ca[TFSA]₂

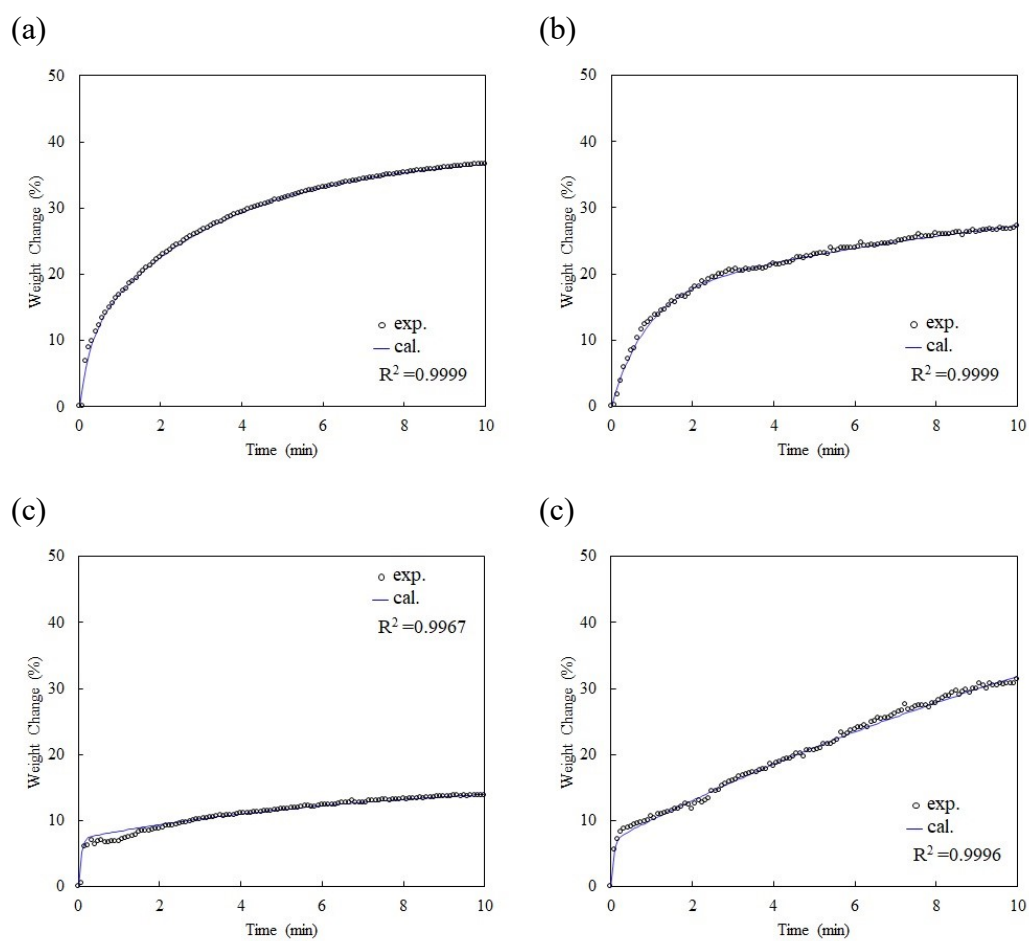


Fig. S2 Reaction kinetics analysis using the double exponential model for the initial stages of NH_3 absorption by TFSA salts at 300 K: (a) $\text{Na}[\text{TFSA}]$, (b) $\text{K}[\text{TFSA}]$, (c) $\text{Mg}[\text{TFSA}]_2$, and (d) $\text{Ca}[\text{TFSA}]_2$

Zeolite

The adsorption and desorption behaviors of NH_3 on zeolites are shown in Figures S3.

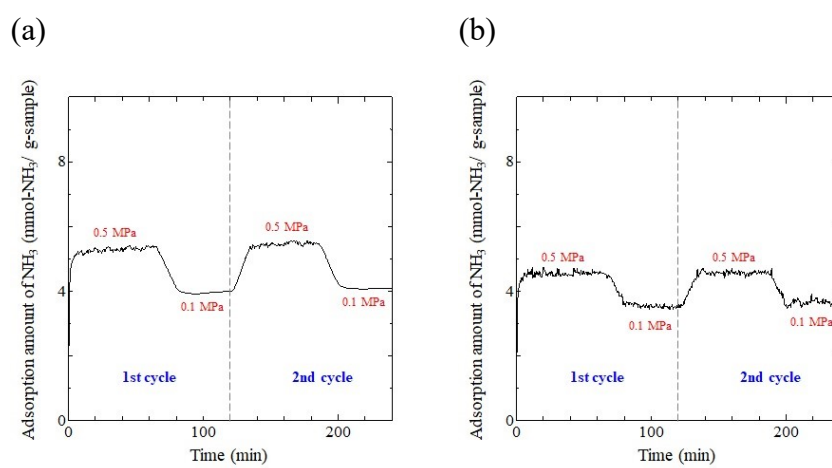


Fig. S3 Typical NH_3 adsorption/desorption cycles on zeolites at 473 K:
(a) Na-Y and (b) A-4